AMENDMENTS TO THE CLAIMS

Please cancel claims 1-4, 6-7, 10-21, 23-26, and 33-46.

Please add new claims 47-58 as follows:

47. An image data generation apparatus, comprising:

reception means for receiving a parameter for displaying three-dimensional image data relating to a plurality of viewpoints for enabling stereoscopic vision;

three-dimensional image display control information generation means for generating, based on the received parameter, three-dimensional image display control information necessary for conversion for enabling stereoscopic vision of said three-dimensional image data in a desired format adapted to a display unit when externally received image data includes said three-dimensional image data; and

file generation means for generating a multimedia information file capable of including both of externally received said three-dimensional image data and said three-dimensional image display control information, or externally received at least two-dimensional image data, and

said three-dimensional image display control information including first information indicating border image data to be displayed around an image of said three-dimensional image data.

48. The image data generation apparatus according to claim 47, wherein

said three-dimensional image display control information further includes second information indicating whether a border is to be displayed around the image of said three-dimensional image data, using said border image data.

49. The image data generation apparatus according to claim 47, wherein said border image data is stereo image data.

50. An image data reproduction apparatus for reproducing a multimedia information file generated by an image data generation apparatus, said image data generation apparatus generating the multimedia information file capable of including both of externally received three-dimensional image data and three-dimensional image display control information, or externally received at least two-dimensional image data, and said three-dimensional image display control information including first information indicating border image data to be displayed around an image of said three-dimensional image data, comprising:

reception means for receiving the multimedia information file;

file structure analysis means for analyzing a structure of said multimedia information file so as to extract said three-dimensional image display control information and said three-dimensional image data or said two-dimensional image data;

three-dimensional image display control information analysis means for analyzing said three-dimensional image display control information;

data reproduction means for reproducing said three-dimensional image data; and

data conversion means for converting reproduced said three-dimensional image data,

said data conversion means converting said reproduced three-dimensional image data for display based on a result of analysis by said three-dimensional image display control information analysis means, and

in accordance with said first information in received said three-dimensional image display control information, said three-dimensional image display control information analysis means selecting border image data included in said first information when said first information includes said border image data and selects one of at least one border image prepared in advance when said first information does not include said border image data, and outputting selected one to said data conversion means.

51. The image data reproduction apparatus according to claim 50, wherein

said three-dimensional image display control information further includes second information indicating whether a border is to be displayed around the image of said three-dimensional image data, using said border image data, and

said three-dimensional image display control information analysis means analyzes information on presence/absence of border display in accordance with said second information, and when the border is to be displayed, further in accordance with said first information in received said three-dimensional image display control information, said three-dimensional image display control information analysis means selects border image data included in said first information when said first information includes said frame image data, and selects one of at least one said border image prepared in advance when said first information does not include said border image data, and outputs selected one to said data conversion means.

52. The image data reproduction apparatus according to claim 50, wherein said border image data is stereo image data.

53. An image data generation method, comprising the steps of:

receiving a parameter for displaying three-dimensional image data relating to a plurality of viewpoints for enabling stereoscopic vision;

generating, based on the received parameter, three-dimensional image display control information necessary for conversion for enabling stereoscopic vision of said three-dimensional image data in a desired format adapted to a display unit when externally received image data includes said three-dimensional image data; and

generating a multimedia information file capable of including both of externally received said three-dimensional image data and said three-dimensional image display control information, or externally received at least two-dimensional image data, and

said three-dimensional image display control information including first information indicating border image data to be displayed around an image of said three-dimensional image data.

54. The image data generation method according to claim 53, wherein

said three-dimensional image display control information further includes second information indicating whether a border is to be displayed around the image of said three-dimensional image data, using said border image data.

55. The image data generation method according to claim 53, wherein said border image data is stereo image data.

56. An image data reproduction method for reproducing a multimedia information file generated by an image data generation apparatus, said image data generation apparatus generating the multimedia information file capable of including both of externally received three-dimensional image data and three-dimensional image display control information, or externally received at least two-dimensional image data, and said three-dimensional image display control information including first information indicating border image data to be displayed around an image of said three-dimensional image data, comprising the steps of:

receiving the multimedia information file;

analyzing a structure of said multimedia information file so as to extract said three-dimensional image display control information and said three-dimensional image data or said two-dimensional image data;

analyzing said three-dimensional image display control information;

reproducing said three-dimensional image data; and

converting reproduced said three-dimensional image data, wherein

in said step of analyzing said three-dimensional image display control information, in accordance with said first information in received said three-dimensional image display control information, border image data included in said first information is selected when said first information includes said border image data and one of at least one border image prepared in advance is selected when said first information does not include said border image data, and

in said step of converting said three-dimensional image data, said reproduced three-dimensional image data is converted for display, based on a result of analysis for analyzing said three-dimensional image display control information.

57. The image data reproduction method according to claim 56, wherein

said three-dimensional image display control information further includes second information indicating whether a border is to be displayed around an image of said three-dimensional image data, using said border image data, and

in said step of analyzing said three-dimensional image display control information, information on presence/absence of border display is analyzed in accordance with said second information, and when the border is to be displayed, further in accordance with said first information in received said three-dimensional image display control information, border image data included in said first information is selected when said first information includes said frame image data, and one of at least one said border image prepared in advance is selected when said first information does not include said border image data.

58. The image data reproduction method according to claim 56, wherein said border image data is stereo image data.